

U.S. Patent Application Serial No. 10/645,849
Substitute Response to Notice dated September 17, 2007
and Amendment

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): An information processing unit comprising:
a reading section for reading information recorded in a recording medium;
an information processing section ~~for processing that conducts a reproduction-processing of~~
the information read by the reading section;

~~a reproducing-condition changing section that changes a reproducing speed of the~~
~~information processing section in accordance with a rotating operation and stopping the~~
~~reproduction-processing of the information processing section in accordance with a pressing~~
~~operation and a touching operatina change instruction recognizing section for recognizing an~~
~~instruction for changing a processing state of said information in the information processing section;~~
a change condition selecting section ~~for selecting that selects change in a processing position~~
~~of the reproduction-processing at least either one of the processing details for starting or stopping~~
~~the processing of the information or the processing for changing a processing position of said~~
~~information; and~~

a processing control section ~~for changing that~~, when the pressing operation or the touching
operation instruction for changing the information processing state is recognized by said the
reproducing-condition changing section change instruction recognizing section, changes start

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~~position of the reproduction-processing of the processing state in said~~the information processing section according to the change in the processing details-position selected ~~in-by said~~the change condition selecting section.

Claim 2 (Withdrawn): An information processing unit comprising:

- a reading section for reading information recorded in a recording medium;
- an information processing section for processing the information read by the reading section;
- a change instruction recognizing section for recognizing an instruction for changing a processing position of said information in the information processing section;
- a change condition setting section for setting processing details for changing the processing position of said information forward or backward and processing details for changing the processing position of said information to a prespecified processing position of said information; and
- a processing control section for changing, when an instruction for changing the information processing position is recognized by said change instruction recognizing section, the processing position in said information processing section according to the processing details set by said change condition setting section.

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Claim 3 (Currently Amended): The information processing unit according to claim 1 further comprising:

a positional instruction recognizing section for recognizing a predetermined position of the information as a cue-point~~an instruction for the processing start position to have the information processed at the same position again,~~

wherein ~~said~~the processing control section changes the start position of the reproduction-processing a processing position of said~~the~~ information processing section to the cue-point~~the processing start position according to the instruction recognized by said positional instruction recognizing section.~~

Claim 4 (Withdrawn): The information processing unit according to claim 2 further comprising:

a positional instruction recognizing section for recognizing an instruction for the processing start position to have the information processed at the same position again, wherein said processing control section changes a processing position of said information processing section to the processing start position according to the instruction recognized by said positional instruction recognizing section.

Claim 5 (Currently Amended): The information processing unit according to claim 3, wherein the information recorded in the recording medium includes data and positional

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information concerning a position of the data,

~~said~~the information processing unit ~~further comprising~~comprises a position recording section ~~for recording~~that, when an instruction for a ~~processing start position~~the cue-point is recognized by the positional instruction recognizing section, records ~~said~~the ~~processing start position~~cue-point and information preceding and following ~~said~~the ~~processing start position~~cue-point[[;]], and

~~wherein~~saidthe processing control section changes ~~a processing position~~the start position ~~of the reproduction-processing in~~of ~~said~~the information processing section to the ~~processing start position~~cue-point according to ~~said~~the positional information recorded in ~~said~~the position recording section.

Claim 6 (Withdrawn): The information processing unit according to claim 4, wherein the information recorded in the recording medium includes data and positional information concerning a position of the data, said information processing unit further comprising:

a position recording section for recording, when an instruction for a processing start position is recognized by the positional instruction recognizing section, said processing start position and information preceding and following said processing start position; wherein said processing control section changes a processing position in said information processing section to the processing start position according to said positional information recorded in said position recording section.

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Claim 7 (Currently Amended): The information processing unit according to claim 5, wherein the processing control section makes, when the start position of the reproduction-processing ~~the processing position in~~ of the information processing section is changed to the ~~processing start position~~ cue-point, ~~said~~ the information processing section process the data ~~for provided in~~ the information recorded in the position recording section.

Claim 8 (Withdrawn): The information processing unit according to claim 6, wherein the processing control section makes, when the processing position in the information processing section is changed to the processing start position, said information processing section process the data for the information recorded in the position recording section.

Claim 9 (Currently Amended): The information processing unit according to claim 1, wherein ~~said change instruction recognizing section determines whether a pressing operation or a touching operation has been performed or not, and~~

~~said~~ the processing control section makes the information processing section change the ~~processing state of the information or move the processing position of the information~~ the start position of the reproduction-processing to the ~~processing start position~~ cue-point when ~~said change instruction recognizing section~~ the reproducing-condition changing section ~~determines detects~~ that a ~~the~~ pressing operation or a ~~the~~ touching operation ~~has been performed~~.

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Claim 10 (Withdrawn): The information processing unit according to claim 2, wherein said change instruction recognizing section determines whether a pressing operation or a touching operation has been performed or not, and said processing control section makes the information processing section change the processing state of the information or move the processing position of the information to the processing start position when said change instruction recognizing section determines that a pressing operation or a touching operation has been performed.

Claim 11 (Currently Amended): The information processing unit according to claim 9, wherein ~~said the change instruction recognizing section~~reproducing-condition changing section is divided ~~to into a plurality of several~~ blocks,

and ~~said the processing control section changes, when it is determined in said change instruction recognizing section~~the reproducing-condition changing section that detects the pressing operation or the touching operation on a specific block has been pressed or touched, changes the start position of the reproduction-processing of a processing position in said the information processing section based on the processing start positioncue-point corresponding to ~~said the~~ specific block.

Claim 12 (Withdrawn): The information processing unit according to claim 10, wherein said change instruction recognizing section is divided to several blocks, and said processing control section changes, when it is determined in said change instruction recognizing section that a specific

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block has been pressed or touched, a processing position in said information processing section based on the processing start position corresponding to said specific block.

Claim 13 (Withdrawn): An information processing unit comprising:

- a reading section for reading information recorded in a recording medium;
- an information processing section for processing the information read by the reading section;
- a positional instruction recognizing section for recognizing an instruction for a processing start position to have said information processed at the same position again;
- a position recording section for recording, when an instruction for the processing start position is recognized by the positional instruction recognizing section, said processing start position and information preceding and following said processing start position;
- a change instruction recognizing section for recognizing an instruction for changing a position of said information to be processed by said information processing section;
- a processing control section for changing, when the instruction for changing a position of said information to be processed is recognized by the change instruction recognizing section, a position of the information by said information processing section to the processing start position based on the information recorded in said position recording section.

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Claim 14 (Withdrawn): The information processing unit according to claim 13, wherein the information recorded in the recording medium includes positional information concerning data and a position of the data,

said position recording section records a processing start portion corresponding to an instruction recognized by the positional instruction recognizing section and said information preceding and following the processing start position; and

said processing control section changes a position for processing in said information processing section according to said positional information included in said position recording section.

Claim 15 (Withdrawn): The information processing unit according to claim 14, wherein said processing control section makes said information processing section process data for the information recorded in the position recording section when the position for processing by the information processing section is changed to the processing start position.

Claim 16 (Currently Amended): The information processing unit according to claim 1, wherein ~~said change instruction recognizing section is rotatably provided to detect the rotating direction, and~~

~~said the~~ processing control section moves the start position of the reproduction-processing ~~of moves a position for processing by~~ the information processing unit forward or backward according

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to the rotating direction of the rotating operation detected by ~~said~~the ~~change instruction recognizing~~
~~section~~reproducing-condition changing section.

Claim 17 (Withdrawn): The information processing unit according to claim 2, wherein said
change instruction recognizing section is rotatably provided to detect the rotating direction, and
said processing control section moves a position for processing by the information processing
unit forward or backward according to the rotating direction detected by said change instruction
recognizing section.

Claim 18 (Withdrawn): The information processing unit according to claim 13, wherein
said change instruction recognizing section is rotatably provided to detect the rotating direction, and
said processing control section moves a position for processing by the information processing
unit forward or backward according to the rotating direction detected by said change instruction
recognizing section.

Claim 19 (Currently Amended): The information processing unit according to claim 1
further comprising: a read control section ~~for controlling~~that controls operations of the
reading section,

wherein ~~said~~the read control section ~~makes~~, when ~~a position for processing by~~ the start
position of the reproduction-processing of the information processing section is changed by the

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processing control section, makes the reading section read information near ~~said~~the changed processing position.

Claim 20 (Withdrawn): The information processing unit according to claim 2 further comprising:

a read control section for controlling operations of the reading section, wherein said read control section makes, when a position for processing by the information processing section is changed by the processing control section, the reading section read information near said changed processing position.

Claim 21 (Withdrawn): The information processing unit according to claim 13 further comprising:

a read control section for controlling operations of the reading section, wherein said read control section makes, when a position for processing by the information processing section is changed by the processing control section, the reading section read information near said changed processing position.

Claim 22 (Currently Amended): An information processing unit comprising:

a reading section for reading information recorded in a recording medium;

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an information processing section ~~for processing that conducts a reproduction-processing of~~
the information read by the reading section;

a reproducing-condition changing section for changing a reproducing speed of the
information processing section in accordance with a rotating operation and stopping the
reproduction-processing of the information processing section in accordance with a pressing
operation and a touching operationa change instruction recognizing section for recognizing a change
instruction for changing a processing state of said information in the information processing section;
and

a processing control section ~~for making that~~, when the pressing operation or the touching
operation is conducted ~~the change instruction for changing the processing state of the information~~
~~is recognized by said change instruction recognizing section~~by the reproducing-condition changing
section, said makes the information processing section change a processing position of the
~~reproduction-processing~~~~execute at least either one of the processing for starting or stopping~~
~~processing of said information or the processing for changing a processing position of said~~
information.

Claim 23 (Withdrawn): An information processing unit comprising:

a reading section for reading information recorded in a recording medium;

an information processing section for processing the information read by the reading section;

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a change instruction recognizing section for recognizing a change instruction for changing a position of said information to be processed by this information processing unit; and

a processing control section for making, when a change instruction for changing a processing position of the information is recognized by the change instruction recognizing section, said information processing section execute both the processing for changing a processing position of said information to a preset processing start position and the processing for moving the processing position of said information forward or backward.

Claim 24 (Currently Amended): An information processing method comprising the steps of:

reading information recorded in a recording medium and conducting a reproduction-processing of the information;

selecting change mode of a processing position of the reproduction-processing ~~at least either one of the processing for starting or stopping the processing of said information or the processing for changing a processing position of said information;~~ and

changing ~~the~~ a reproducing speed of the reproduction-processing by an information processing unit by a rotating operation and/or stopping the reproduction-processing by a pressing operation or a touching operation; and

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~~changing a processing position of the reproduction-processing processing state of said information based on the result of the selected selection of the processing change mode when a change instruction for changing the processing state of said information is recognized.~~

Claim 25 (Currently Amended): An information processing program stored in a computer-readable a recording medium, the program for making a ~~computing section~~computer execute the information processing method according to claim 24.

Claim 26 (Currently Amended): A recording medium ~~for recording that stores~~ the information processing program therein, wherein the information processing program according to claim 25 is recorded so that the program can be read out by the ~~computing section~~computer.

Claim 27 (Currently Amended): A reproducing unit comprising:
the information processing unit according to claim 1[[,]];
and a reproducing section ~~for fetching that fetches the reproduction-processed information~~
and ~~reproducing reproduces~~ the information reproduction-processed by the information processing unit processed by the information processing unit as sound or image.

Claim 28 (Currently Amended): The reproducing unit according to claim 27,

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wherein ~~said~~the information processing section ~~processes~~conducts reproduction processing
on music data recorded in a recording medium ~~for reproducing the music data~~;

~~said~~the ~~change instruction recognizing section~~reproducing-condition changing section ~~is~~has
a rotating body ~~which is rotatably provided in a rotatable manner, the reproducing-condition~~
~~changing section changing a reproducing speed of the reproduction-processing of the information~~
~~processing section by a rotating operation on the rotating body and stopping the reproduction-~~
~~processing of the information-processing unit by a pressing operation or a touching operation on the~~
~~rotating body and detects a rotating operation, a pressing operation, and a touching operation to this~~
~~rotating body to recognize a change instruction for changing a processing position to process the~~
~~music data so that the music data can be reproduced~~;

~~said~~the processing control section changes a ~~position for processing~~processing position of
by ~~said~~the information processing section to a previously stored position in response to a ~~the~~the pressing
operation or a ~~the~~the touching operation detected by ~~said~~the ~~change instruction recognizing~~
~~section~~reproducing-condition changing section, and further changes the ~~position for~~
~~processing~~processing position by ~~said~~the information processing section forward or backward in
response to an ~~the~~the rotating operation detected by ~~said~~the ~~change instruction recognizing~~
~~section~~reproducing-condition changing section; and

at ~~the~~the reproducing section outputs the information processed by ~~said~~the information processing
section as ~~voices and sound~~sound.

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Claim 29 (Currently Amended): A reproducing unit comprising:
the information processing unit according to claim 22; and
a reproducing section ~~for fetching and reproducing~~that fetches and reproduces the
information reproduction-processed by the information processing unit,
wherein the ~~change instruction recognizing section~~reproducing-condition changing section
of ~~said~~the information processing unit ~~is~~has a rotating body provided in a rotatable manner, the
reproducing-condition changing section changing a reproducing speed of the reproduction-
processing of the information processing section by a rotating operation on the rotating body and
stopping the reproduction-processing of the information-processing unit by a pressing operation or
a touching operation on the rotating body which is rotatably provided and detects a rotating
operation, a pressing operation, or a touching operation to the rotating body to recognize a change
instruction for changing the processing position to process the music data so that the data can be
reproduced; and
the processing control section of ~~said~~the information processing unit changes the processing
position for processing byof the information processing section in the information processing unit
to a previously stored position when ~~a state shift from the not-pressed state to the pressed state or~~
~~that from the not-touched to the touched-state~~the pressing operation or the touching operation is
detected during non-pressed condition or non-touched condition by ~~said~~the ~~change instruction~~
~~recognizing section~~reproducing-condition changing section,

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and the processing control section ~~further moves the processing position for processing by~~
~~said information processing section, forward or backward in the rotating direction~~ when a pressing
~~operation or a touching operation~~ the rotating operation is detected by ~~said~~ the change instruction
~~recognizing section~~ reproducing-condition changing section while detecting the pressing operation
~~or the touching operation~~ and ~~further a rotating operation is detected in the state, forward or~~
~~backward in the rotating direction.~~

Claims 30 - 58 (Canceled)